RENAULT

TECHNICAL NOTE 6507A

Vehicle	*After-Sales type*	*Engine type*	*Engine suffix*	*Vdiag*
MEGANE II	B M1X C M1X E M1X K M1X L M1X	F9Q	803 804	50 58
SCENIC II	J M1X			
LAGUNA II	B G1X K G1X	F9Q	758 759	18 1C
	B G09 K G09	G9T	600	14
VEL SATIS	BJ00 BJ0H	G9T	606	14

Subsection concerned: 13B

Particle filter fault finding procedure Interpretation of faults DF311 and DF312

This note cancels and replaces the interpretation of faults DF311 and DF312 included in the MR for vehicles with the engines mentioned on the first page of this Technical Note. To be used from the CLIP CD CD62.

77 11 329 282 **Edition 1 - March 2006** **EDITION ANGLAISE**

"The repair procedures given by the Manufacturer in this document are based on the technical specifications current when it was prepared.

The procedures may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which his vehicles are constructed."

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Contents

Page

13B DIESEL INJECTION

Interpretation of faults 13B-1

DF311 PRESENT OR STORED	FAILED REGENERATIONS LIMIT EXCEEDED

NOTES	**Conditions for applying fault finding procedures to stored faults:** The fault appears after: – the engine is started, – a road test.
	Special notes: If the fault is present, – the **level 1** warning light is lit, – particle filter regenerations when driving are inhibited. Use the **Elé. 1681** bornier for all operations on the engine management computer connector.
	Priorities when dealing with a number of faults: Firstly, deal with the following faults: – **DF308 Particle filter clogged** if it is present or stored, – **DF315 Particle filter differential pressure sensor** if it is present or stored, – **DF717 Particle filter upstream pressure** if it is present or stored.

The fault appears after 10 failed attempts at regeneration while driving.

1 - **Run command SC017 Particle filter regeneration** and follow the relevant procedure described in the Interpretation of commands section in the fault finding manual for the engine/engine suffix concerned.
If regeneration is still not possible or is ineffective, replace the particle filter.

2 - Change the oil and replace the oil filter.

3 - Explain again to the customer the procedure for regenerating when driving to avoid unnecessary repairs: see **PART D** of the interpretation of DF312 explained later in this Technical Note.

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition, wait 3 minutes and carry out a road test followed by a check with the diagnostic tool.

DF312 PRESENT OR STORED	SPEED REQUEST

NOTES	**Conditions for applying fault finding procedures to stored faults:** The fault appears after: – the engine is started, – a road test.
	Special notes: If the fault is present, – a warning message or a special particle filter warning light is displayed on the instrument panel, – the message or warning light means there is a specific need for the vehicle to be driven to carry out the regeneration of the particle filter when driving. Use the **Elé. 1681** bornier for all operations on the engine management computer connector.
	Priorities when dealing with a number of faults: Firstly, deal with the following faults: – **DF308 Particle filter clogged** if it is present or stored, – **DF315 Particle filter differential pressure sensor** if it is present or stored, – **DF717 Particle filter upstream pressure** if it is present or stored.

The fault appears following a certain number of failed regeneration attempts when driving, or if the weight of soot in the particle filter is above a certain threshold.

PART A

The flow chart on the following page allows analysis of the driving profile and the causes for the warning to come on:

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition, wait 3 minutes and carry out a road test followed by a check with the diagnostic tool.

DF312 **CONTINUED 1**	

Repair request with **DF312 Speed Request** present or stored ONLY.

↓

Read the information from the **Particle filter** sub-function: **PR784 to PR793 DF312 recordings No. 1 to No. 10**.

↓

Are PR784 to PR793 all equal to 0 km?

Yes → (to the end of the flowchart)

No

↓

Within these parameters (PR784 to PR793):
- Find the parameter with the highest mileage: it is the **Mileage of the last DF312**.
- Note the parameter index on the order of repair with the relevant mileage value.
  E.g.: PR787 = 4657 km

↓

Read the information in the **Particle filter** sub-function:
PR794 to **PR803 Stored regeneration failures No. 1 to No. 10**.

↓

At least one PR794 to PR803 = 32766 km?

Yes → B

No

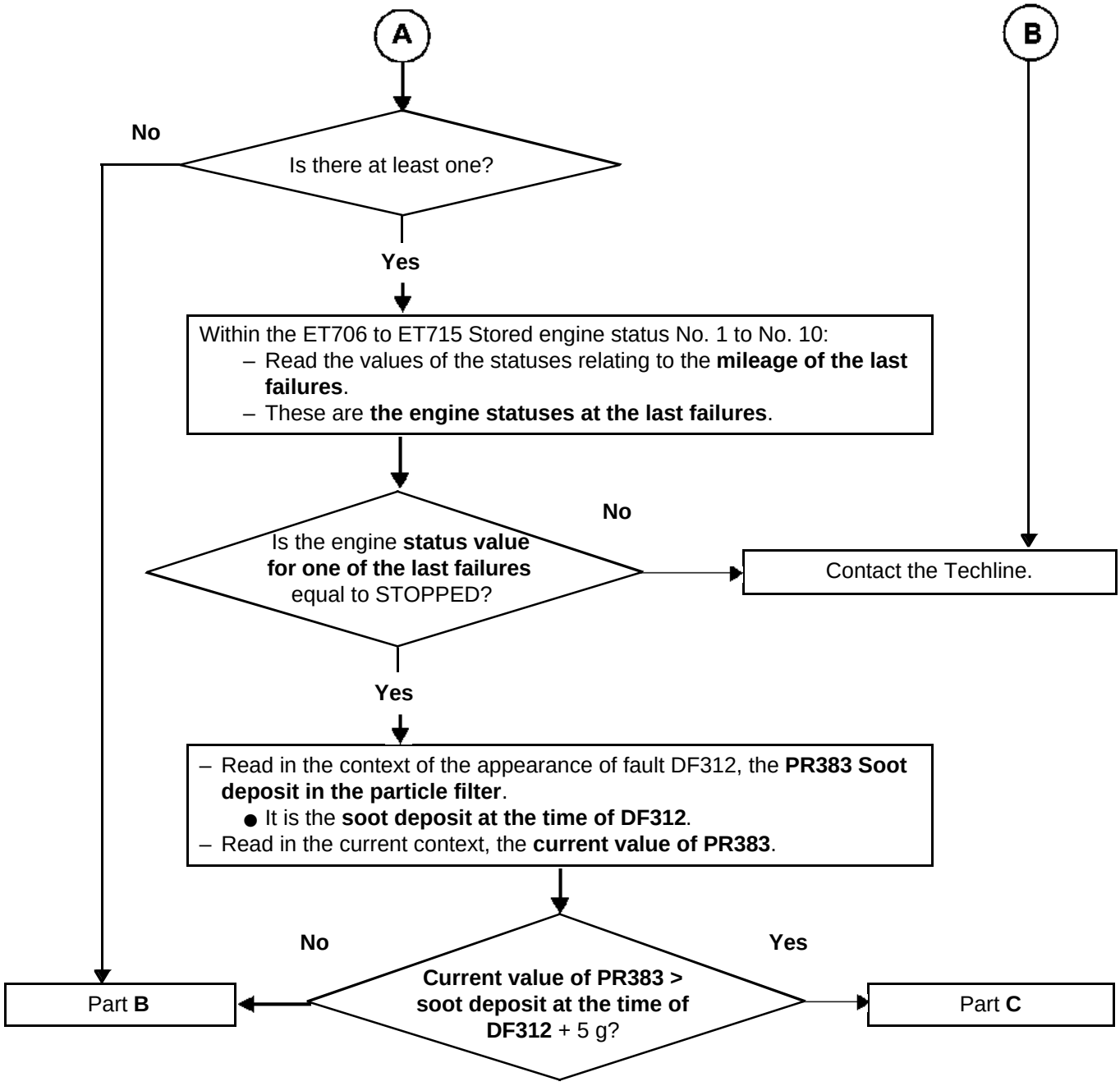
↓

Identify the mileage or mileages from the values of **parameters PR794** to **PR803 Stored regeneration failures No. 1 to No. 10** included between the **Mileage of the last DF312** and the **Mileage of the last DF312** - 200 km. It is the **Mileage of the last failures**.
E.g.: 4457 km < PR801 = 4600 km < 4657 km.

↓

A

DF312 **CONTINUED 2**	


A
B
No
Is there at least one?
Yes
Within the ET706 to ET715 Stored engine status No. 1 to No. 10:
– Read the values of the statuses relating to the **mileage of the last failures**.
– These are **the engine statuses at the last failures**.
No
Is the engine **status value for one of the last failures** equal to STOPPED?
Contact the Techline.
Yes
– Read in the context of the appearance of fault DF312, the **PR383 Soot deposit in the particle filter**.
● It is the **soot deposit at the time of DF312**.
– Read in the current context, the **current value of PR383**.
No
Yes
Current value of PR383 > soot deposit at the time of DF312 + 5 g?
Part **B**
Part **C**

DF312 **CONTINUED 3**	

PART B

1 - NO particle filter regeneration.

2 - Write on the order of repair the parameter and status relating to the last failure:

- **Mileage of the last DF312.**
- **Mileage of the last failures.**
- **Engine statuses of the last failures.**

E.g.: PR787 = 4657 km; PR801 = 4600 km; engine status = STOPPED.

3 - Interpretation of the values written on the order of repair by the service advisor for the customer:

Before the last time the **warning light or Particle Filter message** came on (appeared at the **Mileage of the last DF312**), the customer has not adhered to the driving recommendations: the failure that occurred at the **Mileage of the last failure** is due to the engine being switched off.

4 - Service Advisor explains to the customer the procedure to turn off the warning light, backed up by the parameters written in the order of repair: see **PART D**.

PART C

1 - Carry out a regeneration in the Renault dealership with **the approval of the Techline**.

2 - Explain again to the customer the procedure for regenerating when driving to avoid unnecessary repairs: see **PART D**.

PART D

Procedure to switch off the Particle filter message or warning light on the instrument panel.

Certain types of driving can result in the Particle filter message or warning light from being switched on and the fault **DF312 Speed request** to appear. This fault appears when the soot deposit or a number of failures exceed a predetermined threshold in each computer, depending on the vehicle type.

The customer must carry out a specific driving operation (cf. vehicle user manual) that consists of:

1. Checking that the engine is warm
2. Driving at a speed greater than **80 km/h** for **2 minutes** to initiate the regeneration process.

Initiating regeneration	Minimum speed	Minimum time
All vehicle types	80 km/h	2 minutes

3. Then drive at an average speed of **80 km/h**, until the Particle filter message or warning light on the instrument panel turns off. In order for the procedure to succeed, it is necessary to drive without stopping (without stopping the engine) or to leave the engine running at idle speed for an extended period of time. The regeneration time depends on the vehicle and driving conditions but should last for **20 minutes maximum**.

Regeneration duration	Average speed	Maximum time
All vehicle types	80 km/h	20 minutes

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition, wait 3 minutes and carry out a road test followed by a check with the diagnostic tool.

DF312 **CONTINUED 4**	

4. If regeneration when driving fails (the warning light has not switched off or the service warning light has come on), carry out a particle filter regeneration in the Renault dealership. To carry out an after-sales regeneration: check the oil level and remove some oil if it is at the maximum level, then carry out the procedure for command **SC017 Particle filter regeneration** (see Interpretation of commands section of the fault finding manual for the engine/engine suffix concerned).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition, wait 3 minutes and carry out a road test followed by a check with the diagnostic tool.